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February 27, 2006
911-06-001-DGM:eh

TO: Distribution

FROM: David Morris

SUBJECT: February 2006 Interplanetary Network Customer Forum (INCF) Minutes

The following are the Minutes of the inaugural NASA/JPL Deep Space Network (DSN) Interplanetary Network Customer Forum (INCF) Meeting held at JPL on February 14, 2006. The purpose of this forum is to bring together current and future customers of Deep Space Mission Systems (DSMS) with DSMS Managers to communicate current and future plans and share concerns. The meeting also includes a Resource Allocation Review of DSN 26/34/70 Meter tracking asset usage.

These minutes do not attempt to replicate the presentation material. The presentations in the bound handout book given at the INCF Meeting have been posted on the RAPS February 2006 INCF webpage at the following URL: http://rapweb.jpl.nasa.gov/RARB-REDFeb2006.html Corrections or updated versions of the presenters materials are incorporated in the INCF presentations document. The minutes attempt to reflect discussions and any action items identified during the meeting.

The Resource Allocation Review is responsible for reviewing new or changed requirements, adopting recommendations to reduce periods of heavy contention, and for controlling changes to mission and asset requirements. It addressed updated project support requirements and proposed antenna downtime in 2007, 2008, and 2009. Specific periods of oversubscription are addressed with recommended changes to support. The presentation attachment is identical to what was presented.

Agenda

1. Introduction.....B. Weber
2. Roll Call and Overview .....D. Morris
3. NASA Headquarters Perspective – Science Mission Directorate .....C. Holmes
4. JPL DSMS Commitments Office.....E. Luers
5. JPL DSMS Development Operations and Service Office .....A. Bhanji / W. Sible
   a. DSN Implementation Plans FY 06 – 07 .....S. Kurtik / J. Berner
   b. DSN Operations – 2006 “Mini-ACP” .....A. Berman
6. New Or Modified Project Requirements
   a. Venus Express Science Mission .....D. Holmes
   b. Phoenix .....J. Guinn
7. Resource Contentions
   a. Analysis & Recommendation .....E. Hampton/
   .....A. Andujo

b. Projects Responses.....Projects
c. Discussion / Decisions.....All

Customer Forum Representatives

D. Morris introduced Customer Forum representatives and thanked the mission representatives and schedulers for attending the INCF. The following Customer Forum members or their representatives attended:

Bill Weber	JPL	Director for Interplanetary Network Directorate
David Morris	JPL	Resource Allocation Planning Service Manager
Cynthia Abramo	GSFC	STEREO, Kepler Project Representative
Claudia Alexander	JPL	ROSETTA U.S. Project Manager
Leslie Ambrose	GSFC	ST5 Project Representative
Al Bhanji	JPL	DSMS Development, Operations and Service Office
Gene Burke	JPL	Mars Global Surveyor Project Representative
Pat Carr	ITT	ITT DSN O&M Program Manager
Albert Chang	JPL	Lunar-A and Hayabusa Project Representative
Chad Edwards	JPL	IND Mars Network Office Manager
Donald Gates	Boeing	GOES Project Representative
Joe Guinn	JPL	Phoenix Project Representative
Mark Holdridge	APL	MESSENGER, New Horizons project Representative
Dwight Holmes	JPL	Venus Express Project Representative
Chris Jacobs	JPL	Reference Frame Calibration Project Representative
Ben Johnson	JPL	Mars Reconnaissance Orbiter Project Representative
Ed Luers	JPL	DSMS Commitments Office Manager
Ed Massey	JPL	Ulysses/Voyager Project Manager
Bob Mitchell	JPL	Cassini Program Manager
Sophia No	JPL	Mars Express Orbiter Project Representative
Marc Rayman	JPL	DAWN Project Representative
Martin Slade	JPL	GSSR Project Manager
Bob Wilson	JPL	Spitzer Space Telescope Project Manager
Pam Wolken	ITT	Radio Astronomy & Advanced Tracking and Observational Techniques Project Representative
Greg Wright	MSFC	Chandra Project Representative

Introductory Remarks – B. Weber

B. Weber welcomed the review Customer Forum members and all the mission representatives to the INCF. He introduced the plan to restructure the way we schedule maintenance of the DSN Antennas. It was mentioned that we need to look forward into the future of the DSN and he discussed some points of the strategic plans in cost savings (budget), managing risks, development, and described some of the larger architecture decisions for the future of the DSN.

B. Weber introduced the Depot Level Maintenance (DLM), a plan to refurbish the DSN Antennas every three years. The strategy of the DLM plan is to take each antenna down for a one month period (one antenna at a time) and perform all levels of maintenance on that antenna. Refurbishing each antenna every three years would result in a more reliable DSN, more able to meet our commitments of today and in the future.

B. Weber spoke on managing risks, of how the DSN has always given first priority to the customer over maintenance and on meeting our commitments. He stated that the there is a study underway on the issue of power usage at the complexes. The power plan is to use more commercial power and less generator power; to use generator power only as backup.

B. Weber also spoke on meeting our commitments today and in the future. He stated that we are meeting out commitment of 95 % for routine support and 98 % for hi-level support and the overall long-term commitment met was 99%.

In closing, B. Weber expressed that we may experience a glitch here and there and growing pains as we adapt to the conditions of the budget and to the near term operational changes and ask that the projects work with us through these changes.

Overview – D. Morris

Announced that the Resource Allocation Review Board has been changed to Interplanetary Network Customer Forum (INCF) with the Resource Allocation Review as an agenda item. Gene Burke has moved on to a new position as a TMS Manager and he was thanked for his many years of chairing the RARB and as manager of the Resource Allocation Planning and Scheduling Office.

NASA Headquarters Perspective – Science Mission Directorate – C. Holmes

Reviewed the organization and budget in the Science Mission Directorate. Senior Reviews of Science mission extensions are required by law and the results of the recent Heliophysics Review were noted. Recent IMAGE communication silence and possible causes were noted.

JPL DSMS Commitments Office – E. Luers

Recently promoted, E. Luers presented his organization chart and noted his plans to simplify the commitments process.

JPL DSMS Development Operations and Service Office – A. Bhanji / W. Sible

W. Sible reviewed the organizational structure and staff. W. Sible noted that the ITT Program Manager, Pat Carr, is leaving with Duveen Rivera replacing him. Key changes are to implement the plans B. Weber noted earlier regarding keeping the DSN "green" within the current budget allocation. Use of Reliability Centered Maintenance, per NASA policy will begin once the model is developed.

DSN Implementation Plans FY 06 – 07 – S. Kurtik / J. Berner

S. Kurtik's presentation is fully updated and now attached. She noted that DSS-45 ADCR is to occur in 2007 and not in 2006 as shown. The 26M subnet is undergoing changes. DSS-16 is only available for acquisition aid and possibly for GOES-N support. Meanwhile, the dates for decommissioning DSS-46 and DSS-66 in late FY08 are still TBD.

DSN Operations – 2006 "Mini-ACP" – A. Berman

A. Berman discussed critical events supported and planned for in early CY06. New Horizons launch and Stardust return have been successful. Plans are for ST-5 launch and support, MRO Mars Orbit Insertion, Venus Express Venus Orbit Insertion and STEREO A&B launch.

Venus Express Science Mission – D. Holmes

D. Holmes presented the current status of the mission that launched on November 9, 2005. Since then, the post-Venus Orbit Insertion (April 11, 2006) portion of the mission will now have some DSN support. Specifically, this is to support Bi-static Radar Observations, Solar Corona Observations, and Radio Science Occultation and augment special science campaigns.

Phoenix – J. Guinn

J. Guinn, Phoenix Mission System Manager, reviewed the mission. Key to the DSN is that there will be no DSN direct communication with the spacecraft once it arrives on the surface of Mars. Phoenix will depend on UHF communication with orbiting spacecraft using one of two antennas. Launch features initial acquisition at Goldstone on most launch dates; the Madrid site will nominally acquire within 30 minutes of spacecraft separation from the launch vehicle. Kourou can fill DSN gaps when Goldstone is not in view or Madrid has not risen. After launch, Phoenix has two critical maneuvers where 70M antenna support is required.

Resource Contention Summary – A. Andujo

The changes since the February 2005 RARB were presented: Project Date Changes, New Projects, and Changes in DSN Resource Support, DSN User / Mission Planning Set, DSN Major Downtimes, and the IND Resource Implementation Planning Matrix.

The Events, Recommendations, and Analysis were presented to the attendees for approval of the proposed downtimes listed below:

2007 Weeks

05 - 08 - DSS-43 Proposed downtime for grouting and painting
09 - 13 - DSS-65 Antenna Drive Cabinet Replacement and 200W S/B U/L TXR installation
14 - 17 - DSS-65 proposed extension of Antenna Drive Cabinet Replacement downtime
18 - 22 - DSS-66 Proposed downtime for Hydraulic Pump refurbishment
27 - 30 - DSS-46 Proposed downtime for Hydraulic Pump refurbishment

All Resource Analysis Team (RAT) Recommendations for the above proposed downtimes and contention were accepted prior to, and during the February 14, 2006 INCF. *Please refer to the final INCF Redbook Final V2.0 located on the RAPweb**

2008 Weeks

06 – 09 - DSS-54 Proposed downtime for X/Ka Band Installation
10 – 13 - DSS-15 Proposed Life Extension downtime
- DSS-54 Proposed downtime for X/Ka Band Installation
14 – 17 - DSS-15 Proposed Life Extension downtime
- DSS-54 Proposed downtime for X/Ka Band Installation
18 – 22 - DSS-15 Proposed Life Extension downtime
40 – 52 - DSS-43 Proposed Life Extension downtime

All Resource Analysis Team (RAT) Recommendations for the above proposed downtimes and contention were accepted during and subsequent to the February 14, 2006 INCF. *Please refer to the final INCF Redbook Final V2.0 located on the RAPweb**

2009 Weeks

01 - 52 - DSS-43 Proposed Life Extension downtime

All Resource Analysis Team (RAT) Recommendations for the above proposed downtimes and contention were accepted during and subsequent to the February 14, 2006 INCF. *Please refer to the final INCF Redbook Final V2.0 located on the RAPweb**

Closing Remarks* – *D. Morris

D. Morris thanked everyone for his or her participation and cooperation; announced that the August 2006 JURAP will be used for the next INCF and the next scheduled INCF meeting will be scheduled for February 2007.

Final INCF REDBOOK Version 2.0

The February 2006 INCF REDBOOK Final Version 2.0 has been modified to reflect the recommendations that were accepted and rejected by the Projects/Users:

***** http://rapweb.jpl.nasa.gov/RARB-REDFeb2006.html

Note: Only the recommendation colored "GREEN" will be implemented in the RAP database.